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AMENDMENT  
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53. (Original) A method for use with a portable wireless information device (WID) within a space, the WID including a transmitter for transmitting wireless WID signals, the method comprising the steps of:

obtaining position information indicative of the distances of signal paths between the WID and specific locations within the space;

using a first sub-set of the position information to identify a first estimate of WID location;

using a second sub-set of the position information to identify a second estimate of WID position; and

using the first and second estimates to identifying a final estimate of the WID location.

54. (Original) The method of claim 53 wherein the step of using the first and second estimates includes generating a confidence factor for each of the estimates where the confidence factors are indicative of the accuracy of the estimates.

55. (Original) The method of claim 54 wherein the step of using the first and second estimates further includes identifying the estimate having the highest confidence factor as the final estimate.

56. (Original) The method of claim 54 further including the step of identifying first and second regions within the space that are associated with the first and second information sub-sets and wherein the step of generating confidence factors includes determining relative juxtapositions between the estimates and the first and second regions.

57. (Original) The method of claim 56 wherein the first and second regions include first and second central locations, respectively, and; wherein, the step of determining relative juxtapositions includes comparing the estimated locations to the first and second central locations.

58. (Original) The method of claim 54 wherein the step of using the first and second estimates further includes mathematically combining the first and second estimates to provide a final estimate of WID location as a function of the confidence factors.

59. (Original) The method of claim 53 further including rendering at least one of the estimates accessible to applications requiring WID position estimates.

60. (Original) The method of claim 53 wherein the step of obtaining includes providing a separate wireless signal receiver at each of the specific locations, receiving signals from the WID and using the signals to identify the position information.

61. (Original) The method of claim 60 wherein the position information includes signal strength information and wherein the step of using the signals includes determining the signal strengths.

62. (Original) The method of claim 53 wherein the step of obtaining includes providing a separate wireless signal transmitter at each of the specific locations and at least one receiver within the space, transmitting signals from the transmitters to the WID, identifying the position information via the WID and transmitting the position information from the WID to the at least one receiver.

63. (Original) The method of claim 62 wherein the position information is signal strength information.

64. (Original) The method of claim 53 wherein first and second facility regions are associated with the first and second position information sub-sets and wherein the first and second regions overlap.

65. (Original) The method of claim 53 further including the step of using N-2 additional sub-sets of the position information to identify N-2 additional estimates of WID position wherein the step of using the first and second estimates to identify a final estimate of the WID position includes using a sub-set of the first through Nth estimates to identify a final estimate of the WID location.

66. (Original) The method of claim 65 wherein the subset of estimates includes all of the first through Nth estimates.

67. (Original) The method of claim 66 wherein the step of using the first through Nth estimates includes identifying a confidence factor for each of the N estimates.

68. (Original) The method of claim 67 wherein the step of using the first through Nth estimates further includes identifying the estimate having the highest confidence factor as the final estimate.

69. (Original) The method of claim 67 further including the step of identifying N regions within the space that are associated with the first through Nth information sub-sets and wherein the step of generating confidence factors includes determining relative juxtapositions between the estimates and the first through Nth regions.

70. (Original) The method of claim 69 wherein the step of identifying N regions includes identifying regions such that each location within the space is located within at least two separate regions.

71. (Original) The method of claim 69 wherein the first through Nth regions include first through Nth central locations, respectively, and, wherein, the step of determining relative juxtapositions includes comparing the estimated positions to the first through Nth central locations.

72. (Original) The method of claim 67 wherein the step of using the first through Nth estimates further includes mathematically combining at least a sub-set of the first through Nth estimates to provide a final estimate of WID location as a function of the confidence factors.

73. (Original) The method of claim 53 wherein the steps of using the first and second sub-sets of position information include providing a single processor running first and second programs to determine the first and second locations, respectively.

74. (Original) The method of claim 53 wherein the steps of using the first and second sub-sets of position information include providing first and second processors running the first and second programs to determine the first and second locations, respectively.

75. (Original) The method of claim 53 further including the step of identifying first and second regions within the space that are associated with the first and second information sub-sets and wherein the first and second regions at least in part overlap.

76. (Original) The method of claim 53 wherein the step of using a first sub-set includes running a first program to estimate WID position and the step of using a second sub-set includes running a second program to estimate WID position.

77. (Original) The method of claim 76 wherein the first and second programs are different.

78. (Original) The method of claim 77 wherein the first and second sub-sets are identical.

79. (Original) The method of claim 77 wherein the first and second sub-sets are different.

80. (Original) The method of claim 76 wherein at least the first program includes at least first and second algorithms that are performed as a function of general WID location.

81. (Original) The method of claim 53 wherein the space is a three dimensional space within an automated facility.



82. (Original) A method for use with a portable wireless information device (WID) within a space, the WID including a transmitter for transmitting wireless WID signals, the method for tracking the position of the WID within the space and comprising the steps of:

obtaining position information indicative of the distances of signal paths between the WID and specific locations within the space;

attempting to use a first sub-set of the position information to identify a first estimate of WID location;

attempting to use a second sub-set of the position information to identify a second estimate of the WID location;

when one of the first and second estimates is identified, rendering the one of the first and second estimates accessible by applications requiring WID location; and

when the one of the first and second estimates is not identified and the other of the first and second estimates is identified, rendering the other of the first and second estimates accessible by applications requiring WID location.

83. (Original) The method of claim 82 further including the step of, when both the first and second estimates are identified, identifying a confidence factor for each of the first and second estimates where the confidence factors are indicative of the accuracy of the estimates and identifying the estimate associated with the greatest confidence factor as a final estimate to be rendered accessible.

84. (Original) The method of claim 82 wherein the position information includes signal strength information.

85. (Original) The method of claim 82 wherein the step of obtaining includes providing a separate wireless signal receiver at each of the specific locations, receiving signals from the WID and using the signals to identify the position information.

86. (Original) The method of claim 82 wherein the step of obtaining includes providing a separate wireless signal transmitter at each of the specific locations, transmitting signals from the transmitters to the WID, identifying the position information via the WID and transmitting the position information from the WID to the at least a first receiver.

87. (Original) A method for use with a portable wireless information device (WID) within a space, the WID including a transmitter for transmitting wireless WID signals, the method for tracking location of the WID within the space and comprising the steps of:

tracking WID location with a first wireless position estimating system to generate a first position estimate;

tracking WID location with a second wireless position estimating system to generate a second position estimate; and

using the first and second estimates to identifying a final WID position estimate.

88. (Original) The method of claim 87 wherein each of the tracking steps includes providing receivers at spaced apart specific locations within the space, receiving wireless signals transmitted by the WID and determining a location related characteristic of the received signals that is indicative of the distances of signal paths between the WID and specific locations of the receivers, the step of tracking WID location with the first system further including using a sub-set of the location related characteristics to generate the first position estimate and the step of tracking WID location with the second system further including using a sub-set of the location related characteristics to generate the second position estimate.

89. (Original) The method of claim 88 wherein the location related characteristics includes signal strength.

90. (Original) The method of claim 87 wherein the step of using the first and second estimates to identifying a final WID position estimate includes identifying the most accurate estimate of the first and second estimates as the final estimate.

91. (Original) The method of claim 90 wherein the space is an enclosed space within a facility.

92. (Original) The method of claim 87 wherein the first and second estimating systems use different algorithms to estimate WID position.

93. (Canceled)

94. (Canceled)

95. (Canceled)

96. (Original) A method for estimating the position of a wireless information device (WID) within a space, the method comprising the steps of:

- a) estimating WID position via a first estimating program;
- b) identifying a confidence factor for the WID position estimate;
- c) when the confidence factor fails to meet a threshold requirement, rendering the position estimate accessible to other application; and
- d) when the confidence factor fails to meet a threshold requirement, repeating steps (a) through (c) with a second estimating program.

97. (Original) The method of claim 96 wherein step (d) is performed for each of a plurality of estimating programs until one of WID position has been estimated at least once via each of the estimating programs and an estimate that meets the threshold requirement has been identified.

98. (Original) The method of claim 97 wherein, after WID position has been estimated via each of the estimating programs, when none of the estimates meets the threshold requirements, the method includes the step of performing another function.

99. (Original) The method of claim 98 wherein the another function includes indicating that WID position is unknown.

100. (Original) A method for estimating the position of a wireless information device (WID) within a space, the method comprising the steps of:

- a) generating a first WID position estimate via a first estimating program;
- b) generating a second WID position estimate via a second estimating program; and
- c) using the first and second estimates to identify a final WID position estimate.

101. (Original) The method of claim 100 wherein the first and second estimating programs are different.

102. (Original) The method of claim 100 further including the step of generating a confidence factor for each of the first and second estimates and wherein the step of using the first and second estimates includes using the confidence factors.

103. (Original) The method of claim 102 wherein the step of using the confidence factors includes mathematically combining the first and second estimates as a function of the confidence factors.

104. (Original) The method of claim 102 wherein the step of using the confidence factors includes the step of selecting the one of the first and second estimates that is associated with the highest confidence factor as the final estimate.

105. (Original) A method for use with a portable wireless information device (WID) within a space, the WID including a transmitter for transmitting wireless WID signals, the method of tracking the position of the WID within the space and comprising the steps of:

obtaining position information indicative of the distances of signal paths between the WID and specific locations within the space;

attempting to use a first sub-set of the position information to identify a first estimate of WID location;

attempting to use a second sub-set of the position information to identify a second estimate of the WID location;

determining if at least one of the estimates is sufficiently accurate;

when at least one of the estimates is sufficiently accurate, rendering the likely most accurate of the estimates accessible as the final estimate; and

when none of the estimates is sufficiently accurate, performing another function.

106. (Original) The method of claim 104 wherein the step of performing another function includes indicating that the WID position is unknown.

107. (Original) The method of claim 104 wherein the step of determining if at least one of the estimates is sufficiently accurate includes generating a confidence factor for each of the estimates and comparing the confidence factor to a threshold factor and, when a confidence factor is greater than the threshold factor, determining that the associated estimate is sufficiently accurate.